A Common Sense Approach to Research

What is research?

A dictionary definition of research is as follows:

“The systematic investigation into and study of materials, sources, etc. in order to establish facts and reach new conclusions”.

Or

“An endeavour to discover new or collate old facts etc. by the scientific study of a subject or by a course of critical investigations”.

Within the health service there have always been certain groups of staff who have been involved in research such as the medical staff. Nowadays more and more staff are getting involved in looking at the service they provide and seeing if things can be done differently. Obviously changes in practice should not be made on a whim or a personal preference but should be looked into with great care. It may be that there is already a wealth of information published about your particular area and that after reviewing this evidence changes can be made. More often in specialist areas, there is not so much evidence around and so undertaking research within the work place is advocated.

This section is designed to help you understand the jargon that is associated with research. It will also guide you through the process of having an idea, getting help, designing a research project and completion.

What types of research are there?

There are various types of research and you will have heard many of the terms being used both in the literature and by researchers themselves. Below are some simple explanations of each of the common terms:
Qualitative research:

Qualitative research looks at information gleaned from individuals and the meanings that those individuals place on that information. An example of such work would be if a department decided to interview its entire staff to ask them about the work practices, how these practices affect them and any changes that may be imminent. The results of this type of survey could show how happy the staff are, what their work means to them and how they may view new changes.

Greenhalgh (1997) gives us some fine examples of the different methods that can be used to undertake qualitative research:

• **Documents** – Study of documentary accounts of events, such as meetings.
• **Passive Observation** – Systematic watching of behaviour and talk in natural occurring settings.
• **Participant Observation** – Observation in which the researcher also occupies a role or part in the setting, in addition to observing.
• **In Depth Interviews** – Face to face conversation with the purpose of exploring issues or topics in detail. Does not use pre-set questions, but is shaped by a defined set of topics.
• **Focus Groups** – Method of group interview, which explicitly includes and uses the group interaction to generate data.”

Quantitative research:

This type of research is directly looking at the collection of numerical information, usually under controlled circumstances and the analysis of this information using statistical tools.

An example of a quantitative study would be a “Time and Motion” study. No attempt is made to find the workers interpretation or feelings about the study, it is just the bare numerical facts that are being gathered. Sometimes quantitative research is described as “hard science” as it deals with definite and immovable facts. Qualitative research because of its emphasis on feelings and personal interpretations is sometimes referred to as a “soft science”. There are many reasons why one method would be chosen over the other, but it can also be said that the
weaknesses of one method can be complimented by the strengths of the other.

Audit:

In 1993, the Department of Health set down guidelines for Clinical Audit and recognised that care within the Health Service is given by a multitude of staff. The guidelines they suggested were designed for all staff so that consistency could be achieved across the disciplines.

They defined audit as:

“A method used to look systematically at the procedures for the diagnosis, care and treatment of patients, examining how associated resources are used and investigation the effect care has on the outcome and quality of life for the patient”

Audit is a crucial part of what is known as the quality assurance cycle. This means that steps can be taken to analyse the care that is given to the patient. The steps involved in this process are:

• Analysing present practice
• Setting agreed standards
• Observing practice
• Comparing practice with the standards
• Changing practice if needed
• Implementing changes
• Re-auditing and reviewing practice

Who is involved in research?

Historically it used to be that only certain staff groups were involved with research. In more recent times, there have been moves to view the way we that we work in more collaborative ways. Because of this, more and more staff groups are getting involved with research within the workplace. It is not uncommon to see work published now with authors from different disciplines showing the interprofessional relationships and work practices. By looking at all the staff who are involved in a particular patient episode and getting all their perspectives, great moves can be made to improve a service. As groups of staff get together and examine
the work they do, ideas emerge to try out new methods, examine current practices and liaise with other hospitals or disciplines to make changes.

**Activity:**

What research have you been involved in?

Do you know what type of research it was?

Do you know why that particular type of research was used that time?

Was the research published?

**Why is it important to do research?**

Within the Health Service and in the private sectors, there are always new developments and products available. As part of the whole Clinical Governance approach we cannot just make changes to our practice upon personal preferences and persuasions from companies. The services we provide have to be right for the patients, the staff and the organisation. Because of this we have to be rigorous in our approach to changing practice and research itself.
What is involved in research?

Depending on the type of research you choose for your particular patients or area, there are a variety of different steps that you may need to consider.

As a very basic outline the following steps may be of use:

• Choose an area you would like to look at
• Look to see if there has been any other work undertaken in that particular area
• Decide what question you would like to pose
• Decide what is the best way to look more closely at the subject
• Plan your methods
• Decide on the sample size
• Undertake your plan
• Gather the findings
• Examine the findings
• Make sense of the findings
• See if you apply the findings

Then you will need to talk to others about perhaps implementing the findings in your work place. You may then want to think of getting published. Remember that if you have sat down and thought of your research question, undertaken some research and then decide not to publish, the rest of your professional community loses out.

Activity:

Does your unit have access to a Research Department? If yes, who is your contact there?

Does your unit have access to an Audit Department? If yes, who is your contact there?

Does your department have a designated Research Lead?
Does your department have a designated Audit Lead?

Meet up with these people and find out what is happening in your area.

Discuss with them your areas of interest and allow them to put you in touch with like-minded people.

How do you know if a published piece of research is any good?

There are various checklists available to help you look at research findings systematically. If you are a beginner in examining literature then these lists can help you formulate questions and answers. Once you become more experienced at both reading and reviewing research findings there will be certain questions that automatically spring to mind. Examples of the sort of questions that you might like to ask yourself when reading a piece of research are as follows:

- Who is the author of this piece?
- Are they qualified to undertake this research?
- Is there any evidence of bias, for example is the piece sponsored by a drug company that has an interest in the results?
- Was a literature review undertaken?
- Was it comprehensive?
- Does the reference list reflect what is being discussed in the text?
- What methods were used?
- Do they tell you why these methods were used over any other method?
- Were they in your opinion, the right methods to use?
- What sample size did they use?
- Was it large enough?
- What findings did they come up with?
- Do all the figures add up?
- Could you use these findings in your area?
You may find, when reading research articles that you use a list of questions like the above to analyse the findings etc. You may add you own questions to the list as you go along.

**How do I go about doing some research myself?**

Before you launch yourself head long into a first piece of research, it might be useful to find out what is being done at present in your area. Researchers can be quite secretive and quiet about their work but if asked would be glad to discuss what they are doing! If you start talking to other staff you are likely to find not only what research is happening at present but also what ideas staff have for research in the future. If this is of interest, you are likely to be invited to be part of that research project. Ideally this is a very good way to get started as it usually means that there are a few of you involved who have varying experiences of research and can help each other along.

If this is not the case and you want to embark on a piece of research alone, then there are still staff around who can help you. Most Trusts have departments that solely look after the research and audit projects that are being undertaken. This means that if you decide on a project, you must register your project with them, and by registering with them, they will support you and help you along the steps of the project. This registering will also help the Trust gain finances from the Government and gather an overall picture of the research activity in their area. Some research departments run courses to help the first time researcher starting out. Others may recommend similar courses at educational establishments to help.

**Activity:**

Think about your own area of practice - what would you like to research?

What would be your initial research question?
How would you go about it?

Who else is available in your area to help you in this task?

What is Evidence Based Practice?

Evidence Based Practice is a method of examining the clinical practices we have and making sure that they are based on sound facts. By understanding and interpreting the findings of others, we can change practice and improve the patient experience. To do this, we need to be able to access the up to date research and publications in our own area and be able to systematically review these findings and make decisions about our own practices.

Not all research findings that are published are credible and skills are needed to be able to separate rogue pieces of research from the valuable.

Activity:

What protocols/ guidelines do you work with?

Are they evidence based?

Where would you start to look for the evidence to underpin your current practices?
Recommended Reading:


